DOCUMENT RESUME

ED 210 222 SO 013 729

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TITLE	Independence? A Teaching Unit on Vermont in the World Economy.
INSTITUTION	Vermont State Dept. of Education, Montpelier.; Vermont Univ., Burlington. Center for World Education.
SPONS AGENCY	Associated Industries of Vermont, Montpelier.; Vermont Bankers' Association, Montpelier.
PUB DATE	80
NOTE	37p.
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	Cultural Awareness; Economic Development; Economic Factors; *Economics Education; Futures (of Society); *Global Approach; Learning Activities; Secondary Education; Social Studies; *State History; Teaching Methods; Units of Study
IDENTIFIERS	*Vermont

ABSTRACT

This unit is intended to help Vermont high school students in social studies classes understand ways in which northern New England individuals and groups relate to global social and economic change. Although activities are based on common New England scenes and experiences, they can be easily adapted by classroom teachers to reflect life in other regions. Activities are organized around 10 topics--economic links of Vermont to the rest of the world, origin of material objects found commonly in Vermont households, Vermont's role in world trade, internationally-owned companies in Vermont, foreign companies and the U.S. market, the extent of world-wide events on students in Vermont, freedom of trade, and basic economic concepts. Among the many activities suggested for each topic are discussing topics in class and in small groups, keeping international consumer diaries, listing material goods made in Vermont and/or elsewhere, reading assigned passages, writing research reports, collecting objects from home and explaining how they link Vermonters to places outside their community and nation, interviewing community business people regarding exports and imports, and participating in various map and globe projects which relate Vermont to the rest of the world. For each activity, information is presented on objectives, materials needed, and procedures. Also included where necessary are background information, tabular data, reading selections, and student handouts. (DB)

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THE VERMONT ECONOMIC EDUCATION PROJECT

1980

INDEPENDENCE?

A teaching unit on

VERMONT IN THE WORLD ECONOMY

ECON TREK activities are supported by grants from
THE ASSOCIATED INDUSTRIES OF VERMONT
and the VERMONT BANKERS ASSOCIATION
with the cooperation of the University of Vermont
Continuing Education and the Vermont State Department of Education.

SP013729

Independence?

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ECON TREK and this Guide are made possible through grants from The Associated Industries of Vermont and the Vermont Bankers' Association.
ECON TREK, Vermont State Department of Education, Montpelier, VT 05602

Some of the lessons were adapted from the following:

Global Issues: Activities and Resources for the High School Teacher by Paul Mulloy and Ken Switzer, CTIR, Denver, CO.

Indiana in the World: The World in Indiana, Indiana University.

Special Thanks for contributions from

Vermont Department of Development and Community Affairs

Center for World Education, University of Vermont

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These are a few headlines that are likely to appear in our newspapers in any one evening. Global issues surround us, engulf us, and frustrate us. In face of these global challenges, what can the individual do? Must we be passive? Must we be cynical? Can Vermonters play a meaningful international role?

Individuals not only relate to the world by their beliefs and attitudes, but also their behavior often has international aspects. Some individuals are surprised at the widespread and diverse ways that their daily lives are filled with international links--through goods, money, information and people. For instance, our roles as consumers put us in touch with a great number and variety of foreign products. An effort to keep a diary of these links becomes almost an overwhelming task:

Awakened by a Japanese clock radio..
a Swiss watch provides a double-check on the time..
morning coffee from Brazil..
ride to work in a Fiat..
on tires made of Malayan rubber..
while listening to the Rolling Stones..
on a German-made radio..
buying Saudi-Arabian gas..
and diamonds from South Africa.

The Independence? unit is an attempt to help us identify ways the individual singly or in groups can relate to these challenges worldwide in the future. Our role economically as Americans, New Englanders, and Vermonters challenges our way of lives in meeting these challenges. As teachers, can we help our students be better prepared to become global citizens?

INDEPENDENCE?

ECON TREK #9 is called Independence?
And deals with Vermont in the World economy.

Independence? is a collection of sights and sounds common to Northern New England, but representative of people, places and activities of the entire nation. The program first presents the concept of the economically independent New Englander, and then introduces the realities of interdependence.

Independence? is 30 minutes long. The program opens with credits and some common New England scenes. The word *Independence?* is superimposed on one scene. Then these five scenes are used to establish the idea of the independent northern New Englander:

- A businessman talks about a small woodworking firm and its exclusive use of local resources, as the camera views the production line.
- A college student shares his views of New Englanders.
- A school administrator talks about basic competencies and curriculum priorities.
- A Maine lobsterman comments on his work and his values. Another college student shares his view of New England.
- A grocer sets the stage for the remainder of the program by turning to the viewer and saying– "You know, it doesn't matter where you go in New England today, you still do not have the independence you used to have."

Now some more scenes bring out the realities of interdependence:

- The lobsterman returns to comment about the origin of the tools of his trade.
- The manager of a Vermont granite quarry discusses his company's business with Japan.
- We see the products in a neighborhood food store.
- Two New Hampshire industrialists and a businessman from abroad discuss the nature and scope of overseas trade.
- A veteran farmer demonstrates his new tractor.
- The program ends with students asking their teacher "Why do we have to study about other parts of the world?"

Questions to Guide the Viewer

For the next thirty minutes you will see thirteen scenes containing a wide variety of people, places, and activities. There will be no narration and few viewing aids. Therefore, I would like you to consider the following questions as you view the program. We will discuss your answers at the end of the program.

What New England characteristics are identified by the first two speakers? Do you agree with their views?

Do you agree with the education priorities presented by the third speaker, the school administrator?

The Maine lobsterman appears twice in the program.

Compare the ideas he expresses in his first appearance with his later comments. Do these ideas conflict or complement each other?

The bearded grocer makes but one statement. Do you agree with this statement? How would you state this idea?

The speakers and scenes that follow the lobsterman's second appearance convey similar views. How would you summarize them?

How would you respond to the question that appears at the end of the program? What other questions might have been asked instead?

DURING THE PROGRAM

...Ask the group to rate each of the characters who appear in the program on scale from "independence" to "interdependence". A rating scale is included on this page. When the program is finished, have the group share their ratings and draw any conclusions. Then ask, "In the best of all possible worlds, where should the marks on the scale be? Why?"

Assign two viewers, preferably sitting at the front of the room, to do a special activity while the program is showing:

Give them a large paper map of the world. An outline map is okay; the larger the better.

Tell them to put a pin in each country or place outside of New England that's mentioned or referred to in the program. They could also color in these countries with magic markers.

After the program, have the two people show the map to the group.

Ask the group to draw conclusions from this map.

RATING SCALE WORKSHEET

	Independence Self-Reliance	Interdependence Other-Reliance
Montgomery wood products		
College student 1		
Lobsterman		
College student 2		
Grocer		
Rock of Ages executive		
Howard's Market Manager		
Hitchnor Mfg. executive		
Mr. Kowlarskar		
Hazelett Corp. executive		
Farmer		
Students in classroom		
You		

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WHO AMONG US . . . ?

OBJECTIVES:

1. To help students identify their economic interdependence with the world.
2. To help students draw conclusions about the relationship between their lives and the world.
3. To help students assess the cost/benefit of an interdependent world.

TEACHER DIRECTIONS:

Each of the questions should be assigned to a small group of students. Have the groups compile information necessary from the class members. As groups report back to the class, record the information on the board. Some groups may wish to develop a graphic representation of their results.

WHO AMONG US...

1. Parents drive a foreign car?
2. Has traveled to a foreign country?
3. Is wearing something made in a foreign country?
4. Belongs to an organization with members or programs in other countries? (YMCA-YWCA, Scouts, 4-H, Churches, etc.)
5. Eats food from other countries? (Name some.)
6. Like foods that originated in a foreign country? (Name some.)
7. Speaks or understands another language?
8. Collects stamps from other countries?
9. Has studied geometry?
10. Has bought toys from another country?
11. Has a record by the Beatles, other foreign groups or singers?
12. Has watched live on T.V. something happening in another part of the world?

WRAP-UP:

Have the class discuss how their lives are affected by those links to other parts of the world. What would life be like in your community with or without these links to the world? Are there other ways your community is linked to the world?

TO EXTEND THIS ACTIVITY:

Assign the "International Roles" reading for homework. Have each student compile a 24-hour "international consumer" diary. As a comparison, have some of the students compile a list of things they used that were made in Vermont.

100% AMERICAN

OBJECTIVES:

To help students recognize how they are linked to other economies in other nations through objects you use every day, and how these people and nations are linked to them (interdependence).

To give students an opportunity to draw conclusions from artifacts.

TEACHER DIRECTIONS:

1. Have students read "100 Percent American."

2. Tell students to underline three kinds of information in "100 Percent American":

   (1) the objects the man uses (for example, soap, moccasins, etc.)
   (2) the groups of people mentioned in connection with the objects (for example, Indians, Asiatic Nomads, etc.)
   (3) the places in the world that the objects come from (for example, India, China, etc.)

3. Tell students to collect objects from their own homes in a box. These objects should be chosen as ones that link you to other groups of people and to places outside your community and nation. If an object is too big or too valuable to move, simply list the item on a sheet of paper.

4. Divide a sheet of paper into three columns. Label the first column "objects" at the top; label the second column "groups of people"; and label the third column "places". It will probably not be possible to complete the information in columns 2 and 3 for every object, but do the best you can.

   Below is a sample of what you are to do:

objects	groups of people	places
wrist watch etc.	Swiss	New York, Switzerland (others?)

5. Bring your collection to class with you and share your findings with other students.

DISCUSSION:

Use these questions.

1. Can other students and your teachers help you find out more information about the objects for columns 2 and 3? If so, fill in the additional data.

2. Do all students have similar objects? Explain.

3. How many objects, groups of people, and places can you count during the course of the discussion that various students mention? Keep tabs.

4. What would life be like without them?

NOTE: This lesson may also be done by doing steps 3-5 first, and then doing the reading.

ONE HUNDRED PER-CENT AMERICAN

There can be no question about the average American's Americanism or his desire to preserve this precious heritage at all costs. Nevertheless, some insidious foreign ideas have already wormed their way into his civilization without his realizing what was going on. Thus, dawn finds the unsuspecting patriot garbed in pajamas, a garment of East Indian origin; and lying in a bed built on a pattern which originated in either Persia or Asia Minor. He is muffled to the ears in un-American materials: cotton, first domesticated in India; linen, domesticated in the Near East; wool from an animal native to Asia Minor; or silk whose uses were first discovered by the Chinese. All these substances have been transformed into cloth by methods invented in Southwestern Asia. If the weather is cold enough he may even be sleeping under an eiderdown quilt invented in Scandanavia.

On awakening he glances at the clock, a medieval European invention, uses one potent Latin word in abbreviated form, rises in haste, and goes to the bathroom. Here, if he stops to think about it, he must feel himself in the presence of a great American institution; he will have heard stories of both the quality and frequency of foreign plumbing and will know that in no other country does the average man perform his ablutions in the midst of such splendor. But the insidious foreign influence pursues him even here. Glass was invented by the ancient Egyptians, the use of glazed tiles for floors and walls in the Near East. porcelain in China, and the art of enameling on metal by Mediterranean artisans of the Bronze Age. Even his bathtub and toilets are but slightly modified copies of Roman originals. The only purely American contribution to the ensemble is the steam radiator, against which our patriot very briefly and unintentionally places his posterior.

In his bathroom the American washes with soap invented by the ancient Gauls. Next he cleans his teeth, a subversive European practice which did not invade America until the latter part of the eighteenth century. He then shaves, a masochistic rite developed by the heathen priests of ancient Egypt and Sumer. The process is made less of penance by the fact that his razor is of steel, an iron-carbon alloy discovered in either India or Turkestan. Lastly, he dries himself on a Turkish towel.

Returning to the bedroom, the unconscious victim of un-American practices removes his clothes from a chair, invented in the Near East, and proceeds to dress. He puts on close-fitting tailored garments whose form derives from the skin clothing of the ancient nomads of the Asiatic steppes and fastens them with buttons whose prototypes appeared in Europe at the close of the Stone Age. This costume is appropriate enough for outdoor exercise in a cold climate, but is quite unsuited to American summers, steamheated houses, and Pullmans. Nevertheless, foreign ideas and habits hold the unfortunate man in thrall even when common sense tells him that the authentically American costume of gee string and moccasins would be far more comfortable. He puts on his feet stiff coverings made from hide prepared by a process invented in ancient Egypt and cut to a pattern which can be traced back to ancient Greece, and makes sure that they are properly polished, also a Greek idea. Lastly, he ties about his neck a strip of bright colored cloth which is a vestigial survival of the shoulder shawls worn by seventeenth-century Croats. He gives himself a final appraisal in the mirror, an old Mediterranean invention, and goes downstairs to breakfast.

Here a whole new series of foreign things confronts him. His food and drink are placed before him in pottery vessels, the popular name of which—China—is sufficient evidence of their origin. His fork is a medieval Italian invention and his spoon a copy of a Roman original. He will usually begin the meal with coffee, an Abyssinian plant first discovered by the Arabs. The American is quite likely to need it to dispel the morning-after effects of overindulgence in fermented drinks, invented in the Near East; or distilled ones, invented by the alchemists of medieval Europe. Whereas the Arabs took their coffee straight, he will probably sweeten it with sugar, discovered in India; and dilute it with cream, both the domestication of cattle and the technique of milking having originated in Asia Minor.

If our patriot is old-fashioned enough to adhere to the so-called American breakfast, his coffee will be accompanied by an orange, domesiticated in the Mediterranian region, a cantaloupe domesticated in Persia, or grapes domesticated in Asia Minor. He will follow this with a bowl of cereal made from grain domesticated in the Near East and prepared by methods also invented there. From this he will go on to waffles, a Scandinavian invention, with plenty of butter, originally a Near-Eastern cosmetic. As a side dish he may have the egg of a bird domesticated in Southeastern Asia or strips of the flesh of an animal domesticated in the same region, which have been salted and smoked by a process invented in Northern Europe.

Breakfast over, he places upon his head a molded piece of felt, invented by the nomads of Eastern Asia, and, if it looks like rain, puts on outer shoes of rubber, discovered by the ancient Mexicans, and takes an umbrella, invented in India. He then sprints for his train—the train, not sprinting, being an English invention. At the station he pauses for a moment to buy a newspaper, paying for it with coins invented in ancient Lydia. Once on board he settles back to inhale the fumes of a cigarette invented in Mexico, or a cigar invented in Brazil. Meanwhile, he reads the news of the day, imprinted in characters invented by the ancient Semites by a process invented in Germany upon a material invented in Germany upon a material invented in China. As he scans the latest editorial pointing out the dire results to our institutions of accepting foreign ideas, he will not fail to thank a Hebrew God in an Indo-European language that he is a one hundred percent (decimal system invented by the Greeks) American (from Americus Vespucci, Italian geographer).

From Ralph Linton, "One Hundred Per-Cent American," The American Mercury, Vol. 40, 1937.

VERMONT: A WORLD TRADER

OBJECTIVES:

To demonstrate economic interdependence in Vermont exports.

To draw conclusions from economic data.

DIRECTIONS:

1. Divide the class into small groups and ask them to brainstorm a list of products which they think might be produced in their state and exported to other nations.

2. Distribute and have students read copies of handout "Vermont: A World Trader" and "Vermont Exports".

3. Ask students to group the various products into different categories by several different criteria.

4. Draw some general conclusions about the role of Vermont as a world trader.

   Discussion questions:

   - How did your predictions of Vermont exports compare with the actual list?
   - Why do people come to Vermont to purchase these things?
   - Which of these exports are most important to Vermont's economy? Why?

FOLLOW-UP ACTIVITY:

Identifying Local Business Firms Involved in Foreign Trade

In this activity the teacher has several options to adapt the activity to his or her area and needs. The class could be divided into groups, with each studying one local industry, or the class as a whole could study one industry. A class could choose to study a multi-national corporation in their state or locale rather than local industry. The choice should be based on student interest and what is located in your area. Students may gather the needed information by visiting the business, writing to them, or inviting a spokesperson to come to class. The more they gather, the better.

Students should compile their information in charts, tables, graphs and visuals (posters, bulletin boards, or transparencies) so it is available to the class. They should indicate on a map of the world where the corporation they are studying is located in their state, and where they trade in the world. On the map pictures may be used to indicate the products traded. Another map might be drawn to indicate the methods and routes of transportation that would be used to get the products from their area to the parts of the world in which they are sold.

After compiling the information the following are some possible discussion questions:

1. Why is this corporation able or willing to sell its products to other countries?

2. How do you think this company has been affected by its involvement in international trade? Has it been helped or hurt? Explain your answer.

3. What problems has the company faced because of its international involvement?

4. How has our community or locale been affected by the activities of this company?

5. How are the people and country who receive these products affected by this international trade?

6. Why do you think this company involved in international trade chose to locate in our state or locale? Was it a multi-national before locating here, or after?

Businesses may be willing to send representatives to talk to classes about their companies' activities in international trade.

In this exercise, emphasis is on the destination of the final product produced by the Vermont firm. Another dimension your students may wish to explore is, "What are the sources of the raw materials used in Vermont production?"

Adapted from a Lesson in Global Issues: Activities and Resources for the High School Teacher. Center for International Relations: Denver, Colorado. 1979.

VERMONT: A WORLD TRADER

When people think of Vermont, they often think of skiing, fishing, hiking, sailing, farming, and country inns. Since it has no major harbors or ports, and since it is not considered to be a major industrial state, few people would imagine that Vermont is actually heavily involved in world trade.

Among the Vermont products sold in world markets are:

stereo speakers
acrylic gift and gourmet ware
wood blackboard compasses
protractors
T-squares
triangles
straight edges
textile machinery
pre-formed polylaminate capsules for wine and liquor bottles
maple candy
maple sugar
glass and plastic optical lenses
ready mixed concrete
precast concrete products
custom plastic molding
ski poles
ski racks
boot trees
bike racks
granite memorials
furniture
lumber
gift wrapping
dinnerware and decorative accessories
stoneware
paper and foam food containers
medical safety and quality assurance test equipment
commercial ovens
sportsware
pressboard
paperboards for file folders
boxboard
electrical insulation and industrial specialties
book manufacturing
lacquers
paints
thinners
grinders
electrical connectors
taps
dies
reamers
counterbores
electronic coils
can and bottle cap making machinery
reels
stone working machines
tire chains
double knit fabrics
clinical thermometers
lab glassware
package shoe shine
spot remover
moist towelettes
industrial weighing equipment
magazines
toys
steel molds for plastics
slate
animal ointment
animal vitamin and mineral supplement
cattle identification equipment
large canvas totes and soft luggage
finished bobbins and speeders
talc
synthetic monofilaments
electrical wire and cable
paper food containers
gear cutting finishing machines
yard and garden equipment
cider presses
home workbenches
blades and vanes for jet engine compressors
special hardware for jets
printing papers
rubber heels
shoes
strips
proprietary and veterinarian medicines
pumps for nuclear power general equipment and spare parts for fossil fuel power generation and pulp paper industries
continuous casting machines
powdered dairy products
industrial weighing systems
infrared materials
transformers

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plastic monofilaments
canoes
fiber aircraft parts
hockey sticks
wind energy conversion systems
solar energy hardware
cheese
synthetic fiber for brushes
brooms
artificial Christmas trees
leather
piano action parts
golf club shafts
skis
paint products
apples and apple products
slate
dry cell batteries
flash lights
valves
asbestos
cast iron stoves
marble
burlap
paper bags

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VERMONT MANUFACTURERS WHO EXPORT

Acousti-Phase, Inc.
P.O. Box 207
Proctorsville, 05153
Stereo speakers

Acrylic Design, Inc.
Rte. 100, So. Londonderry 05155
Acrylic gift and gourmet wares

Adams Wood Products, Inc.
P.O. Box 522, Brattleboro 05301
Wood blackboard compasses, protractors T-squares, triangles, straight edges

Allen Company
Box 37, W. Rutland 05777
Textile machinery

Aluminum Cap Seal Company, Inc.
P.O. Box 835, Burlington 05401
Pre-formed polylaminate capsules for wine and liquor bottles

American Maple Products, Corp.
P.O. Box 685, Newport 05855
Maple syrup, maple candy, maple sugar

American Optical Corporation
Putney Road, Brattleboro 05301
Glass and plastic optical lenses

Anderson, A.G., Co., Inc.
Railroad St., Waterbury 05676
Ready mixed concrete, precast concrete products, washed sand and gravel

Arlington, Industries, Inc.
P.O. Box 207, Arlington 05250
Custom plastic molding

Barrecrafters
P.O. Box 136, St. Albans 05482
Ski poles, ski racks, boot trees, bike racks

Beck & Beck, Inc.
P.O. Box 467, 41 Center St., Barre 05641
Granite memorials

Beecher Falls Div. of Ethan Allen, Inc.
Beecher Falls 05902
Bedroom furniture

Bell-Gates Lumber Corporation
Jeffersonville 05464
Hardwood lumber

Ben Moni Corporation
Ben Moni Ave, Bennington 05201
Christmas gift wrapping, all occasion gift wrapping

Bennington Brush Co.
190 North St., Bennington 05201
Hair care, gift and variety wares

Bennington Potters, Inc.
County St., Bennington 05201
Dinnerware and decorative accessories (stoneware)

Bethel Div./Standard Packaging Corp.
Bethel 05032
Paper and foam food containers-cups, butter tubs, plates

Bio-Tek Instruments, Inc.
5000 Shelburne Rd., Shelburne 05482
Medical safety and quality assurance test equipment

Blodgett, G.S. Co., Inc. The
50 Lakeside Ave., Burlington 05401
Commercial ovens, baking and roasting

Bogner of America, Inc.
Bogner Drive, Newport 05855
Skiwear, tennswear, sportswear

Boise Cascade, Specialty Paperboard Div.
P.O. Box 498, Putney Rd., Brattleboro 05301
Pressboard, paperboards, for file folders, boxboard, electrical insulation and industrial specialties

Book Press, The
Putney Road, Brattleboro 05301
Complete book manufacturing

Bradley, C. E., Laboratories, Inc.
Putney Road, Brattleboro 05301
Lacquers, paints, thinners

Brattleboro Kiln Drying & Milling Co., Inc.
Box 296, 36 Frost St., Brattleboro 05301
Kiln drying, hardwood dimension stock for furniture manufacturers

Bryant Grinder Corp.
257 Clinton St., Springfield 05156
Internal grinders, external form grinders, center hole grinders, centerless grinders, grinding spindles (belt driven and hi-frequency), special grinders

Burlington Free Press, The
191 College St., Burlington 05401
Daily morning newspaper

Burndy Corporation
212 A Railroad St., St. Johnsbury 05819
Electrical connectors

Butterfield Div., Litton Industrial Products, Inc.
Derby Line 05830

Caddell Coil Corp.
35 Main St., Poultney 05764
Electronic coils

Callahan AMS Machine Co.
61 Main St., Proctor
Can and bottle cap making machinery

Carris Reels, Inc.
Box 696, Rutland 05701
Plywood reels, plastic spools, hardwood reels and spools

Cary Engineering & Machine Co.
RD 4, Camp St., Ext., Barre Town 05641
Stone working machinery

CF Sports
210 South St., Bennington 05201
Skiwear, outerwear

Cersosimo Lumber Co., Inc.
Rte. 142 Vernon Rd., Brattleboro 05301
Lumber, gunstocks, furniture

Champion Cable Chain, Inc.
4th St., Swanton 05488
Tire chains

Channel Mills Inc.
Bradford 05033
Double knit fabrics

Chase Instruments Corp.
Bearman St., Poultney 05764
Clinical thermometers, lab glassware

Chemco Corporation
P.O. Box 251, Granger St. Ext.,
Bellows Falls 05101
Paper converting specialties, waxing, flexographic printing

Chemical Fabrics Corporation
Box 367, 108 Northside Dr., Bennington 05201
Teflon Coated glass fabrics

Cinchpac, Inc.
Box 707, Rte. 7 South, Middlebury 05753
Packaged shoe shine, spot remover, moist towelettes

Clopay Corporation
Overhead Door Div.
P.O. Box 235, Dean Brown Ind. Park,
Ludlow 05149
Overhead garage doors: wood, steel, fiberglass, aluminum

Codeco Corporation of Vermont
Box 1170, Stowe 05672
R.F. Attenuators, electronic test equipment

Colt Industries Inc.
Fairbanks Weighin Div.
711 East St. Johnsbury Rd., St. Johnsbury 05819
Industrial weighing equipment

Cone-Blanchard Machine Co.
P.O. Box 27, Windsor 05089
Multiple spindle automatic bar & chucking machines, vertical rotary surface grinders, vertical universal precision grinders

Cornish Wire Products
Rte. 346, Pownal 05261
Wire and cordsets, plastic insulation

Country Journal Publishing Co., Inc.
139 Main St., Brattleboro 05301
Magazine publishing

Country Woodshop, The
P.O. Box 53, Marshfield 05658
Custom furniture, toys

CPC of Vermont Inc.
P.O. Box 706, Pond Lane, Middlebury 05753
Steel molds for plastics, custom injection molding

Creative Tools, Inc.
309 County St., Bennington 05201
Ratchet tool and tool system

Cross Road Cottage Decoys
Monkton 05469
Hand carved decorative decoys

Cut Slate, Inc.
Depot St., Fair Haven 05743
Slate and slate products

Dairy Association Co., Inc.
Lyndonville 05851
Animal ointment, animal vitamin and mineral supplement

Dana, C.H., Co., Inc.
Drawer A, Main St., Hyde Park 05655
Cattle identification equipment

Deedy Inc.
RFD Box 160, Greensboro Bend 05842
Large canvas totes and soft luggage

Derby Granite Inc.
P.O. Box 136, Derby 05829
Rough granite blocks

DeRonde Plastics Corp.
P.O. Box D, 23 Berlin St., Montpelier 05602
Molded plastics for industry and commerce

Deseureau Machines, Inc.
P.O. Box 402, 53 Granite St., Barre 05641
Wire saws, stone working equipment, saw wire, machining, welding, steel fabricating

Dixie Bobbin Co., Inc.
83 So. Main St., Barre 05641
Finished bobbins and speeders

Durgin & Browne, Inc.
80 Allen Road, So. Burlington 05401
Electronic instrumentation

Eastern Magnesia Talc Co.
Railroad St., Johnson 05656
Talc

Edlund Co., Inc.
Box 929, 159 Industrial Pkwy., Burlington 05401
Food products machinery

EHV-Weidmann Industries, Inc.
Box 278, St. Johnsbury 05819
Electrical insulation for transformers

Engineered Monofilaments Corp.
6047 Williston Rd., Williston 05495
Synthetic monofilaments

Engineered Wire & Cable of Vt., Inc.
Main St., Fair Haven 05743
Electrical wire & cable

Fair Haven Slate Corporation
RFD 1, York St. Ext., Poultney 05764
Slate tile, structural slate, flagging, roofing, building stone

Fellows Corporation
Box 399, Springfield 05156
Gear cutting and finishing machines gear measuring instruments, gear shaper cutters

Fonda Container Div./Standard Packaging Corp.
151-21 Lower Newton St., St. Albans 05478
Paper food containers-plates pail can trays

Garden Way Research
P.O. Box 26V, Charlotte 05445
Lawn and garden equipment, cider presses, home workbenches

Gawet Marble & Granite, Inc.
P.O. Box A, Rte. 4, Center Rutland 05736
Marble and granite monuments, structural work, veneer, novelties, fireplace facings, table tops

General Electric Company, Aircraft Engineer Group
210 Columbian Ave., Rutland 05701
Blades and vanes for jet engine compressors, special hardware for jet engines

George Little Press, Inc.
750 Pine St., Burlington 05401
Offset lithography: advertising brochures, catalogs, forms, books

Georgia Pacific Corp., Whitefield Paper Div.
Gilman 05904
Printing papers

Goodyear Tire & Rubber Co., The
P.O. Box 28, River St., Windsor 05089
Rubber heels, soles, strips

Granite City Tool Co. of Vermont, Inc.
5-11 Blackwell St., Barre 05641
Stone working equipment, forged granite grinding wheels, hand cutting tools, granite polishing machine buffers

Granville Mfg. Co., Inc.
Granville 05747
Wood bowls, spruce clapboards

Greene Corporation
Box 752, Morrisville 05661
Custom machine work, welding

Greenmont Lumber Corp.
Underhill 05489
Hardwood lumber

G.S. Precision, Inc.
West Route 9, Wilmington 05363
Screw machines products, Swiss type precision parts machining, ultrahigh component sub-assemblies

Guild, J.H., Company
Main St., Rupert 05768
Proprietary and veterinarian medicines

Hale Company
Maple St., E. Arlington 05252
Early American dining room furniture

Harbour Industries, Inc.
P.O. Box 188, Shelburne 05482
High temperature wire and cable

Haveg Industries, Inc.
P.O. Box 7, Winooski 05404
Insulated wire, PC board assemblies, cable assemblies

Haynes Brothers, Inc.
Wilmington 05363
Barnboards

Hayward Tyler Pump Co.
P.O. Box 492, 80 Industrial Parkway, Burlington 05401
Centrifugal and condensate Class II and Class III pumps for nuclear power generation equipment and spare parts, for fossil fuel power generation, and pulp paper industries

Hazelett Strip-Casting Corp.
Box 98, Winooski 05404
Continuous casting machines

Hood, H.P., Inc.
187 So. Winooski Ave., Burlington 05401
150 So. Main St., St. Albans 05478
Milk, milk products (Burlington); mild powder (Newport); cottage cheese, butter, powdered dairy products (St. Albans)

Howe Richardson Scale Co.
26 Stronga Ave., Rutland 05701
Industrial weighing systems

Imperial Company, Inc.
Main & Parks Sts., Hartford 05047
Offset printing

International Business Machines Corporation
General Technology Div.
Essex Junction 05452

Semi conductor components

International Cheese Co., Inc.
Hinesburg 05461
Cheese (mozzarella, provolone, cheddar, feta), milk, cream

Island Pond Div. of Ethan Allen, Inc.
P.O. Box 100B, Island Pond 05846
Accessory furniture, table line

Janos Optical Corp.
Rte. 35, Townshend 05353
Infrared materials

Jard Company, Inc.
P.O. Box 650, Bowen Road, Bennington 05201
AC capacitors, Class II control transformers

Johnson Filaments, Inc.
Industrial Ave., Williston 05495
Plastic monofilaments

Johnson, A., Co., The
RD 2, Bristol 05443
Lumber

Jones & Lamson/Textron
Waterbury Farrell Div. of Textron, Inc.
160 Clinton St., Springfield 05656
Turret lathes (TNC and ATL), automatic tracer lathes, thread and form grinders, precision automatic lathes, cylindrical grinders (TNC), optical comparators

Kennedy Bros., Inc.
11 Main St., Vergennes
Household wood furniture accessories; wood gift accessories: candle holders, ice buckets, mirrors, bowls, ash trays, shelves

Kidder, J.F., Mfg. Co., Inc.
40 Allen Rd., So. Burlington 05401
Fabricating machinery

Killington Wood Products
P.O. Box 696, Rutland 05701
Pallets, skids, containers, hardwood and softwood lumber

Ladd Medical, Inc.
P.O. Box 774, Burlington 05402
Medical monitoring instruments

Ladd Research Industries, Inc.
P.O. Box 901, Burlington 05402
Accessories and supplies for electron microscopy

Lane Manufacturing Co.
Montpelier 05602
Sawmill machinery, granite working machinery, general machine shop

Lane Packing, Inc.
P.O. Box 61, Lyndonville 05851
Dressed beef and veal

Laramy Products Co., Inc.
P.O. Box 161, Rte. 5 North, Lyndonville 05851
Plastics welding equipment

Lavallee & Roy, Inc.
W. Canal St., Winooski 05404
Reamers, gaging blanks, metal cutting tools

Leader Evaporator Co., Inc.
25 Stowell St., St. Albans 05478
Maple sugar utensils

Lewis Brothers
P.O. Box 15, West Rupert 05776
Wired & unwired wood floral stems veneer specialties

Little River Wood Products
Moscow 05662
Wood package handles, wood turnings, wooden toys

Lovejoy Tool Co., Inc.
133 Main St., Springfield 05156
Cutting tools and accessories, inserted blade type, indexable blade type, blades

Lucille Farm Products, Inc.
Box 125, Swanton 05488
Mozzarella, provolone

Mack Molding Co., Inc.
Box 127, Arlington 05250
Custom molded plastic products

Mad River Canoe Inc.
Box 363, Mad River Green, Waitsfield 05673
Canoes, canoe accessories

Maser Electronics, Inc.
Box 890, Manchester Ctr. 05255
Electron tubes

Maple Grove, Inc.
167 Portland St., St. Johnsbury 05819
Maple candies, sugar, syrup, salad dressings, mint candies, gift packs, jams and jellies

Mardon Industries, Inc.
Rte. 122, Lyndonville 05851
Sheet metal fabrications, precision machined components, weldments

Maurice Memorials, Inc.
110 Granite St., Barre 05641
Granite memorials

Milbrade, Inc.
P.O. Box 148, Essex Jct. 05452
High temperature insulated wire and cable

Missisquoi Specialty Board Div./Standard Packaging Corp.
Sheldon Springs 05485
Paperboard

Montgomery Schoolhouse Inc., The
P.O. Box 33, Montgomery 05470
Wooden toys, other wood products, steel snow graders

Mountain Paper Products Corp.
Mill St., Bellows Falls 05101
Paper: colored, school art, construction poster, drawing

National Survey, The
Chester 05143
Maps, brochures, map advertising

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New England Digital Corp.
P.O. Box 305, Norwich 05055
Laboratory computer systems, business computer systems, data acquisition systems, digital music synthesizers

Newport Plastics Corp.
Box 466, Derby Road, Newport 05855
Fiberglass aircraft parts, computer housings, aircraft seatcovers, integral skin urethane foam products

Northeast Tool Div.
Vermont American Corp.
Lyndonville 05851
Woodcutting tools, router bits

Northland Group, Inc., The
117 Troy St., Richford 05476
Hockey sticks

North wind Power Co.
P.O. Box 315, Warren 05674
Wind energy conversion systems, solar energy hardware, windmill towers

Nystrom Technology Corp.
47 Elm St., Brattleboro 05301
Replacement parts and repair work for paper and printing industries, centrifugal spin cast machines for electrical motor rotor manufacturing, rotor and stator material handling equipment, special machine development and manufacture

Omega Optical, Inc.
3 Grove St., Brattleboro 05301
Optical coatings, thin film interference filters

Orleans Div. of Ethan Allen, Inc.
Orleans 05860
Wood furniture

Orvis Company, Inc., The
Manchester 05254
Bamboo and graphite fishing rods

Parks & Woolson Machine Co.
Park St., Springfield 05156
Textile finishing machinery, reinforced fiberglass products, custom machinery

Phillips Metallurgical, Inc.
P.O. Box C, Lake St., Swanton 05488
Shell mold castings: ductile and grey iron, stainless steel, steel, aluminum

Phoenix Wire, Inc.
Old U.S. Rte. 2, So. Hero 05486
Teflon insulated microminiature wires & cables

Plastic Monofil Co., Ltd.
Troy Ave., Fort Ethan Allen, Colchester 05404
Plastic welt cord, plastic upholstery buttons, box strapping

Plymouth Cheese Corp., The
P.O. Box 1, Plymouth 05056
Granular curd cheese

Polhemus Navigation Sciences, Inc.
P.O. Box 298, Essex Jct. 05452
Navigational aids, electronics

Polymers, Inc.
P.O. Box 151, Middlebury 05753
Synthetic fibers for brushes, brooms, artificial Christmas trees

Potvin Lumber Co., Inc.
Routes 8 and 100, Stamford 01247
Lumber, hardwood, bark, chips, sawdust

Pownal Tanning Co., Inc.
Main St., No. Pownal 05260
Tanned leathers: cow, sheep, goat

Pratt Read Corp.
Box 284, Moorisville 05661
Piano actions, dimension furniture stock

Precision Metals Co.
Box 186, West Barnet 05870
Commercial, custom, and experimental machining

Precison Valley Mfg. Co.
Chester Rd., Springfield 05156
Garden machines

Putney Converting Corp.
P.O. Box 226, Putney, 05346
Napkins, wrapping tissue

Qualified Sales Corp.
Quality Rd., Rutland 05701
Food and sandwich packaging

Randolph Div. of Ethan Allen, Inc.
Hull St., Randolph 05060
Solid wood household furniture

Readex Microprint Corporation
Main St., Chester 05143
Microprint

Research Engineering, Inc.
P.O. Box 608, Harrel St., Morrisville 05661
Golf club shafts, graphite composites, automated machinery

Rising & Nelson Slate Co., Inc.
W. Pawlet 05775
Roofing slate, flagging

Robertson Paper Co., Inc.
Box 1, Bellows Falls 05101
Wrapping paper: coated, oiled and waxed paper

Rock of Ages Corporation
P.O. Box 482, Barre 05641
Granite products, memorials, features, industrial products

Rollers By Baker, Inc.
Brandon 05733
Paint rollers, pans, sleeves

Rossignol Ski Co., Inc.
P.O. Box 298, Industrial Ave., Williston 05495
Alpine skis

Rouleau Granite Co., Inc.
P.O. Box 567, Metro Center, Barre 05641
Granite monuments

Rosebud [illegible]
Westfield 05874
Cosmetics

Rutland Fire Clay co.
P.O. Box 340, Curtis Ave., Rutland 05731
Caulking, sealants, asphalt coatings and cements, paints and paint remover

Sawyer Brentwood, Inc.
Whitingham 05361

Scandanavian Knitters, Inc.
P.O. Box 48, Linden St., Bennington 05201
Knit underwear and outwear

Shoreham Cooperative Apple Producers Assoc., Inc.
Shoreham 05770
Apples stored and packed

Sorensen's Precision, Instrument Systems Div.
Panton Road, Vergennes 05491
Systems for measurement, display, control of liquids and gases; special purpose computers

Skyline Corporation
P.O. Box 40, Rte. 22A, Fair Haven 05743
Mobile Homes

Smith, Whitcomb & Cook Co., Inc.
87 Prentiss St., Barre 05641
Stone working machinery, gray iron foundry, industrial supplies, sawmill machinery

Softlite, Inc.
Merchants Row, Swanton 05488
Plastic lamps

Space Research Corp.
North Jay Rd., No. Troy, 05859
Electronic and communications research and development, air traffic control simulation equipment, software development

Spartan Products, Inc.
416 Pine St., Burlington 05401
Hockey sticks, brush blocks, custom mouldings, other wood products

Sprague Electric Co.
So. Main St., Barre 05641
Capacitors

Stamp Wholesaler, The
P.O. Box 529, 217 Church St., Burlington 05402
Trade Journal

Standard Register Co., The
Rte. 7 South, Middlebury 05753
Business forms

Stanley Tools
Rte. 67, Shaftsbury 05262
Stockbridge 05772
Hand tools (Shaftsbury), hardwood dimension stock (Stockbridge)

Stephen Greene Press, The
Box 1000, Fessenden Rd., Indian Flat, Brattleboro 05301
Book publishing

Stinehour Press, The
Lunenburg 05906
Books, publications: letterpress and offset

Stowe Reporter Press, Inc., The
Box C1, Stowe 05672
Weekly newspapers, The Stowe Reporter, The Valley Reporter

Superior Steatite & Ceramic Corp.
P.O. Box 1028, St. Albans 05478
Alumina and steatite insulators for electrical industry

Tansitor Electronics, Inc.
West Road, Bennington 05201
Tantalum capacitors

Taran Bros., Inc.
RFD 1, Poultney 05764
Slate tiles, roofing slate, flagstone, veneer stone, structural slab stone

Thomas Turner Co., Inc.
Bellows Falls 05101
Laminated occasional and accessory tables, pine furniture

Thomson Mfg. Co., Inc.
230 Main St., Bennington 05201
Ladies' and children's cotton knit underwear, children's cotton and sythetic knit sport shirts

Toni Totes of Vermont, Inc.
Rte. 100, So. Londonderry 05133
Canvas and leather handbags, totes, luggage, pre-finished items for needlepoint

Tridyne of Vermont, Inc.
80 Allen Rd., So. Burlington 05401
Automatic weighing systems

Trow & Holden Co., Inc.
P.O. Box 475, 45-55 So. Main St., Barre 05641
Pneumatic carving tools, carbide tipped stone cutting tools, stone quarrying tools

True Temper Corporation
104 Portland St., St. Johnsbury 05819
Wallingford 05773
Wood handles for hand tools, shovels, spades

Tucel Industries, Inc.
P.O. Box 627, Maple St., Middlebury 05753
Brushes, brooms, tufted surgical sponges, tufted products

Twin State Wood Products, Inc.
P.O. Box 131, Putney Rd., Brattleboro 05301
Kiln dried lumber, dimension lumber, milling, glued up panels

Ultramotive Corp.
Box 69, Bethel 05032
Automotive chemical products, cleaners, penetrating oils, aerosol and barrier packaging

Unified Data Products Corp. of Vt.

Unified Data Products Corp. of Vt.
Rte. 121, Grafton 05146
Printed forms

Union Carbide Corp., Battery Products Div.
401 Gage St., Bennington 05201
Dry cell batteries

Union Carbide Corp., Battery Products Div.
Box 671, Swanton Rd., St. Albans 05478
Flashlights, battery components

US Samica Corporation
Windcrest Rd., Rutland 05701
Mica electrical insulations

Velan Valve Corporation
Ave. C., Griswold Industrial Park, Williston 05495
Nuclear and commercial valves

Vermarco Ground Products
61 Main St., Proctor 05765
Industrial fillers, agricultural limestone, white decorative aggregates

Vermont Asbestos Group, Inc.
Hyde Park 05655
Asbestos fibre

Vermont Castings
Box 40, Randolph 05060
Cast iron stoves

Vermon Flexible Tubing Co., Inc.
Hill St., Lyndonville 05851
Coolant hose, flexible steel lamp arms

Vermont Instrument Co., Inc.
62 Overlake Pk., Burlington 05401
Filament winding machines, torsion pendulums, spool holders

Vermont Manufacturing Corp.
40 Marble St., W. Rutland 05777
Machines parts, tools, jigs, fixtures, special machinery design, assembly, storage heaters, video micro-processor

Vermont Marble Co.
61 Main St., Proctor 05765
Rough marble blocks, dimension marble and granite, finished marble and granite products

Vermont Plastics, Inc.
P.O. Box 572, 35 Blanchard Court, Montpelier 05602
Plastic housewares, custom molding, plastic industrial parts

Vermont Precision Resistor Co.
P.O. Box 1170, Rte. 100 So., Stowe 05672
Metal film resistors, epoxy coated

Vermont Precision Tools, Inc.
Swanton Industrial Park, Swanton 05488
Drills, tool blanks, k. o. pins, core rods, special round and ground tools

Vermont Research Corporation
Precision Park, No. Springfield 05150
Magnetic memory drums and systems, magnetic memory discs and systems

Vermont Structural Slate Co., Inc.
3 Prospect St., Fair Haven 05743
Structural slate, flooring, roofing, flagstone

Vermont Talc, Inc.
Box 117, Chester 05143
Ground talc

Vermont Tap & Die Company
79 Main St., Lyndonville 05851
Industrial cutting tools

Vermont Weatherboard Inc.
15 West Church St., Hardwick 05843
Barnboard replica manufactured from new lumber

Vermont Wood Crafts, Inc.
P.O. Box 206, Proctorsville 05153
Stereo cabinets

Vitri-Forms, Inc.
P.O. Box 208, 22 High St., Brattleboro 05301
Lasers, scientific apparatus, repair of milk receiver jars, quartz work

Waterbury Companies, Inc.
So. Pleasant St. Ext., Randolph 05060
Custom molded thermo plastic

Wells Lamson Quarry Co., Inc.
700 No. Main St., Barre 05641
Granite dimension stone

White Pigment Corporation
61 Main St., Proctor 05765
Inert pigments

White River Valley Herald
Pleasant St., Randolph 05060
Weekly newspaper, job printing

Whiting, E. B. & A. C., Co.
1 Howard St., Burlington 05401
Plastic monofilaments, brush and broom fibers

Wiessner, F. H., Co., Inc.
159 Lakeside Ave., Burlington 05401
Ski waxes, recreational coatings, water-proofing, ski base refinishing machines and materials

Williams Machine Company, Inc.
Box 189, Poultney 05764
Paper converting machinery, liquid pumps, custom machining, screw machine products

Windsor Minerals, Inc.
P.O. Box 680, Windsor 05089
Ground talc products

Yett, George, Bag Co., Inc.
4th St., Swanton 05488
Burlap, polypropylene, paper bags

York Capacitor Corp.
450 Weaver St., Winooski 05404
Capacitors

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INTERNATIONALLY OWNED COMPANIES IN VERMONT, 1980

Dolomite-Beconta Manufacturing Corporation, Essex Junction
Elmsford, N.Y.

Bogner of America, Inc., Newport
Meindert Wittereen, Executive Vice President
Willy Bogner, K.G., Munich, West Germany

Cone-Blanchard Machine Company, Windsor
Oerlikon-Buhrle Holding Company
Zurich, Switzerland

E. H. V. Weidemann Industries, Inc., St. Johnsbury
H. Weidemann, Ltd.
8640 Rapperswil/SG Switzerland

Hayward-Tyler Pump Company, Burlington
Haywood Tyler, Ltd.
P.O. Box 2
Lutonbeds, England

Johnson Filaments, Inc., Williston
JWI Ltd., 1 Westmount Square
Westmount, Quebec

Major Garment Manufacturing, Inc., Richford
Conrad Sportswear
4446 St. Lawrence Blvd.
Montreal, Quebec

Manchester Manufacturing, Inc., St. Johnsbury
Manchester Children's Wear
9494 St. Lawrence Blvd.
Montreal, Quebec H2N 1P4

Plastic Monofil, Colchester
Calko Mills, Ltd.
9150 Milleur, Room 102
Montreal, Quebec H2N 2A6

Preci-Manufacturing, Inc., Winooski
Preci-Tools, Ltd. and Preci-Surgical, Inc.

Preci-Manufacturing, Inc., Winooski
Preci-Tools, Ltd. and Preci-Surgical, Inc.
Poirier St. Ville
St. Laurent, Quebec

RMD, Inc., St. Albans
Chadon Manufacturing, Ltd.

RMD, Inc., St. Albans
Chadon Manufacturing, Ltd.
9320 St. Lawrence Blvd.
Suite 701
Montreal, Quebec N2N 1N7

Rossignol Ski Company, Williston
Ski Rossignol S.A.
Voiron, France

Shellcraft, Winooski and Vestshell, St. Albans
Shellcast Foundries, Inc.
10645 Lamoureux
Montreal North, H1G 5L4

Skis Dynastar, Inc., Colchester
Skis Dynastar S.A.
Sallanches, France

Softlite, Inc., Swanton
Gilbert Products, Inc.
750-16th Avenue
Pointe aux Trembles
Montreal, Canada

Stotmeister and Company, Rutland
SARBEN UNd BAUSTOFS KG.
D-7894 Stuhlingen-Weizen
West Germany

Transitor Electronics, Inc., Bennington
Waycom, Ltd.
Wokingham Road
Brackell, Berkshire RG 12 IND England

Triplex, Inc., St. Albans
Triplex Engineering
181 Oneida Drive
Pointe Claire, Quebec, Canada

Twincraft, Inc., Winooski
Twincraft, Ltd.
7770 Transcanada Highway
Montreal, Quebec

U. S. Samica Corporation, Rutland
Swiss Insulation Works, Ltd.
CH 4226 Breitenback, Switzerland

UST. Inc. Bennington
Tsubakimo Chain Company
Osaka, Japan

Velan Valve Corporation, Williston
Velan Valve Engineering Companies
1125 Ward Avenue
Montreal, Quebec

Vermarco Ground Products, Proctor
(White Pigment Corporation, Vermont Talc, Inc., Vermont Marble, Callahan-Ams)
Pleuss-Staufer (N.A.)
1 World Trade Center
New York, NY

Westinghouse Airport Systems, South Burlington
Westinghouse Electric Canada
Hamilton, Ontario

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VERMONT EXPORTS

Manufactured exports soared

Vermont's exports of manufactures[1] totaled $200 million in 1976, an increase of 285 percent since 1972. The state ranked 41st nationally in sales of these products to foreign countries. After growing moderately from 1966 to 1969, overseas shipments stagnated in value from 1969 to 1972.

Shipments from Vermont firms to domestic consumers rose by 58 percent during 1972–76, a far slower rate than the growth in exports. Thus, of the state's total growth in manufacturing output, 18 percent was generated by exports. The share of production stemming from foreign sales soared from 4.2 percent in 1972 to 9.7 percent in 1976.

Vermont's exports in 1976 were concentrated in three manufacturing industries—electric and electronic equipment, fabricated metal products, and nonelectric machinery. These products comprised more than four-fifths of the state's foreign shipments in that year. There were smaller foreign sales of instruments, paper, and lumber.

Electric and electronic equipment was the state's largest manufactured export in 1976. The precise value was not published to prevent disclosure of individual companies' data, but it was known that exports were valued at between $64 and $99 million. That total compared with foreign sales in 1969 ranging between $11 and $16 million.

Fabricated metal products were the second largest manufactured export from Vermont, totaling $63 million. Foreign sales represented 37 percent of the industry's output and created 1,200 export-related jobs in the state. Exports of the products were valued at less than $1 million in 1972.

Valued at $34 million in 1976, overseas shipments of nonelectric machinery were double the 1972 total. The share of output accounted for by exports rose from 13 percent in that year to nearly 15 percent of a much larger total in 1976. These foreign sales generated an estimated 700 export-related jobs. Nearly two-fifths of the exports from this industry were metalworking machinery. (See tables 1, 2, and 5.)

The state's economy benefits from goods produced not only for direct shipment to foreign destinations but also from those for ultimate export through other states. Vermont's export figures for manufactures exclude the output of supplying establishments that furnish parts and materials to manufacturers producing goods in final form for export. Such indirect exports are particularly important in industries whose products require further processing such as primary metals, fabricated metal products, and chemicals, and also in those industries whose products constitute components and parts for assembly into machinery, electric equipment, and transportation equipment.

For the United States as a whole, the Census Bureau has estimated that the full impact of exports in total U.S. manufacturing activity was 12.4 percent of shipments, rather the 7 percent attributable to direct exports as shown in table 5. Estimates of the full impact for each state have not been attempted, but it can be assumed that the figures given above for Vermont, which reflect direct exports only, are an understatement.

Agricultural exports slowed

Vermont's share of U.S. agricultural exports in FY 1977, including some manufactures of farm origin, totaled $3 million, $1 million less than the value estimated for FY 1972. A decrease in dairy product exports accounted for the decline. Exports of hides, lard and tallow, and fruit products were each valued at $1 million in FY 1977. (See tables 3 and 4.)

Exports generated jobs

Vermont's $200 million worth of manufactured exports provided direct employment for an estimated 3,500 workers in 1976. From 1972 to 1976 the number of workers engaged in the production of manufactures rose by 11 percent, while export-related employment nearly doubled. Most of the workers producing for export were concentrated in the three major industries discussed above.

In addition, an estimated 1,700 jobs were required in the state to manufacture products used by producers in other states as inputs for manufactures that were ultimately exported. More than half of these jobs were also in the nonelectric machinery electric equipment, and fabricated metals industries from which the major direct exports were made.

Thus, an estimated 5,200 jobs in Vermont were directly or indirectly dependent on exports of manufactured goods. This was 12.6 percent of all manufacturing employment in the state.

Source: U.S. Department of Commerce

[1] Manufactured goods in this report relate to manufactures as defined in the Standard Industrial Classification, and include manufactured food, mineral fuels, fats, oils, firearms, and ammunition not typically part of the Standard International Trade Classification definition of manufactures. For the United States as a whole, these additional products totaled $15.1 billion in 1976. Exports, normally valued at the port of exportation, are adjusted to f.o.b. plant values to make accurate comparisons with production (shipments) data.

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VERMONT: Table 1

MANUFACTURED EXPORTS, PRODUCTION, AND EMPLOYMENT, 1976

- *Vermont's leading manufactured exports were electric equipment, fabricated metal products, and nonelectric machinery.*
- *These three industries accounted for about 85 percent of Vermont's total exports of manufactures.*

Industry Group	PRODUCTION (million dollars)	Estimated Exports	Exports as percent of production	Estimated employment related to exports (thousands)	Employment related to exports as percent of total employment
Total	2,056	200	9.7	13.5	8.5
Electric and electronic equipment	(1)	50–99	...	(1)	...
Fabricated metal products	171	63	37.0	1.2	36.3
Machinery, except electric	227	34	14.8	0.7	11.6
Instruments and related products	44	9	21.4	0.3	21.8
Paper and allied products	185	6	3.1	0.1	3.5
Lumber and wood products	108	4	3.8	0.1	2.7
Misc. manufacturing industries	30	4	11.7	0.1	6.2
Stone, clay, and glass products	86	1–4	...	(1)	...
Transportation equipment	(1)	1–4	...	(1)	...
Rubber and plastic products	50	2	3.3	0.1	3.4
Food and kindred products	337	1	0.4	(2)	...
Leather and leather products	15	1	8.0	(2)	...
Printing and publishing	124	(2)	0.4	(2)	...
Furniture and fixtures	90	(2)	0.4	(2)	...
Chemicals and allied products	20	(2)	2.0	(2)	...
Apparel and textile products	25	(2)	1.2	(2)	...
Textile mill products	26	(2)	0.8	(2)	...
Primary metal industries	(1)	(2)	...	(1)	...

Source: U.S. Department of Commerce

[1] Total includes production values and employment numbers which are withheld for certain industry groups to avoid disclosure of individual companies' data.

[2] Less than 50 employees.
[3] Less than $500,000.
... Not applicable.

INTERBIZ

OBJECTIVES:

1. To help students increase their knowledge of internationally-owned companies in Vermont.

2. To help students draw conclusions about the affect of foreign investments in their state.

3. To help students hypothesize on reasons for foreign investment in their state.

TEACHER DIRECTIONS:

Give students the reading and the list of companies. Divide them into groups to answer the following questions:

1. According to the graph, what is the trend in foreign investment in American business?

2. Which foreign countries have the greatest investment in your state?

3. Why might your state encourage investment from foreign countries?

4. What might have attracted the particular businesses listed to invest in your state?

5. What kinds of industries or businesses seem to attract foreign investment?

6. How would the economy of your state or community be affected by these foreign owned companies? (Consider workers, consumers, businesses and banks.)

Bic pens. Lipton tea, Travelodge Motels, ALL detergent, Keebler crackers, Brylcream and a host of other widely-used products and services are provided by foreign-owned companies. Nestle, for example, has a U.S. sales volume of $1.6 billion annually.

According to Forbes, more than one million Americans are employed by companies which are either completely or substantially owned by foreign concerns.

According to Business Week, April 12, 1976:

> France's Michelin in an auto-related venture is spending $300 million on construction of a new tire plant in South Carolina.
>
> Swedish steelmaker Sandvik last month bought Pittsburgh's Disston, Inc. in a move that may lead to increased imports of Swedish saws and blades into the U.S. and exports of Disston tools and garden equipment to Europe.
>
> Italy's Montecatini Edison bought a metacrylic sheet plant in Kentucky from Swedcast, Inc. and plans to invest $60 million in a polypropylene plant near Houston - an area already dotted with facilities of Germany's Bayer, France's Rhone-Poulenc, and Britain's Imperial Chemical Industries (ICI).
>
> Hansom Trust Ltd., a British conglomerate, is trying to raise its 77% share in Detroit's Hygrade Food Products Corp. to 100%. Last fall it paid $36 million to acquire the textile division of Indian Head, Inc., taken over previously by the Monaco-based Thyssen-Bornemisza Group.
>
> Canadian Pacific Ltd. is stalking U.S. investment opportunities in everything from steel and offshore oil to machinery manufacturing and hotels.

The January 25, Saturday Review gave the following sampling of properties known to have been acquired by Middle Eastern oil interests:

> Here is a representative sampling -- by no means complete -- of properties known to have been acquired by Middle Eastern oil interests:
>
> * Atlanta-Hilton Center, an urban commercial development: 50 percent participation by Kuwaiti interests for $10 million.
>
> * Arizona Land and Cattle Company of Phoenix: 15 percent interest to Saudi Arabia for $9.2 million.
>
> * First National Bank of San Jose, Calif.: 33 percent interest for $14 million from Saudi Arabia.

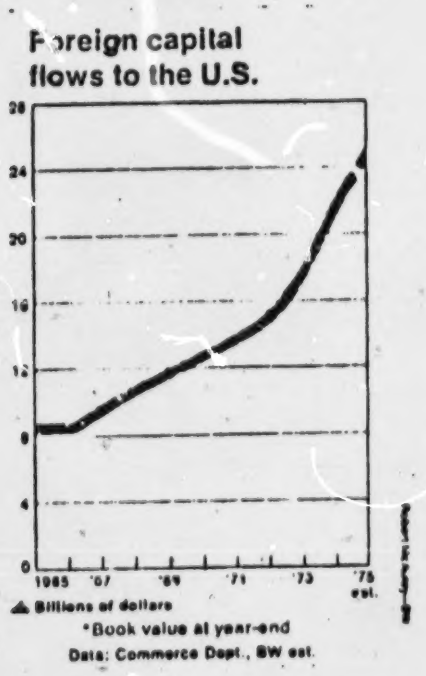
* Security National Bank of Walnut Creek, Calif.: 96 percent owned by a Saudi, estimated cost $120 million.

* Bank of Contra Costa, also of Walnut Creek (pop. 46,400): 57 percent interest bought by same Saudi entrepreneur for $14 million.

And some Vermont examples:

* The Vermont Marble Company in Proctor is now owned by investors from Switzerland.

* Roughly 86,000 acres of Vermont farmland and woodland have recently been purchased by people from outside the United States.



MAPPING THE LINKAGES

OBJECTIVES:

1. To illustrate graphically the extent of world-wide economic linkages.

2. To help students draw conclusions about our linkages to the rest of the world.

MATERIAL NEEDED:

Video Program: Independence?

PROCEDURES:

1. Using the world outline map (or a large map on the classroom wall), locate as closely as you can your town or city and place a black dot on the location.

2. Using the chart of objects, groups and places you compiled from "100% American", draw lines from your community (the black dot) on the map to all the places in the world you listed on the chart. (It might help to use a rule in drawing the lines.)

3. Put your map up on a wall or the bulletin board so that others can see it.

4. Discussion.

   1) In what ways is our community linked to other peoples and places? (manufacturing, trade, etc.)

   2) In what ways are these groups of people and places linked to us? (trade, raw materials, politically, socially, etc.)

5. Show the TV program, Independence?, and assign two viewers, preferably in the front of the room, to put a pin or make a large mark with a magic marker in each country or place outside of New England that's mentioned or referred to in the program.
   Show the map to the class and ask them to draw conclusions about our linkages.

AROUND THE WORLD WITH A DAILY NEWSPAPER

OBJECTIVES

1. Given a copy of a Vermont daily newspaper, students will discover ways in which Vermont is involved in the world.

2. Students will see how other parts of the world affect their daily lives.

MATERIAL NEEDED:

Each student (or group of 2 or 3, if class works well that way) should have one copy of the daily newspaper. Since it is usually not practical to have Sunday editions in the classroom, the weekday issues are recommended.

PROCEDURE:

Have each student (or group) clip all articles that (1) deal with something related to a foreign country, and (2) affect him or her personally. See what kind of articles they pick out based on this bare-bones instruction. (If they cannot find anything that they believe affects them personally, then they really need this unit!) If they get bogged down, a few questions like this will get them started again:

----Is anyone from here going to (or has come from) another country?
----Do you see anything about foreign products which you might use?
----What country mentioned in the paper is farthest away from here? (OR: farthest in terms of how people live?) Can you think of anything at all that you know about that country? Can that possibly have anything to do with our country?
----Can you find anything in the grocery ads (OR automobile ads OR want ads, etc.) that relates to a foreign country?

As articles are located they can be mounted around a large world map on the bulletin board, with a string linking the article with the country involved. Have each student pick one article and tell why he is interested and how it affects our lives. Limit the talks to two minutes. More than one student may choose the same article, if the reasons are different.

As the study progresses a collage of articles can be added to the map, or to a globe which can hang as a mobile, thus reminding students of the wealth of information about the world available each day in the newspaper. It will continually excite and stimulate research on the part of the students.

The activities on the next two pages can be used as options to this newspaper activity.

Optional Newspaper Activity

PROCEDURE:

1. Have the students keep a daily log of their local newspapers for a period of a week or longer. Maps should be posted as compiled.

2. At the end of this period the class should be ready for this type of analysis:

   a. Rank the parts of the world according to the amount of coverage each had in your local paper at this time. Regional divisions such as these could be used: West Europe, East Europe, Asia, Sub-Sahara Africa, South America, Central America, Canada, Middle East...

   b. What part(s) of the world seem to be having the most consequences for your economic future?

Optional Activity

PROCEDURE:

Students might research the attention given to international events or issues by the media. They would use this instrument for a specific amount of time.

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HOW MUCH IMPACT?

OBJECTIVES.

1. To help students draw conclusions about the impact of world-wide events on them and the country.
2. To help students interpret the economic impact of worldwide events.
3. To have students suggest economic concepts involved with global events.

DIRECTIONS:

Listed below are 10 headlines from U.S. newspapers. Across from each headline are three continuum scales that can be used to measure the degree of impact (from 1 = very little to 3 = very much) of the event depicted in the headline. Use the first scale to indicate how much impact the event would have on you as an individual. Use the second scale to indicate the degree of impact the event could have on Vermont, and the third scale for the United States as a nation. Indicate your choices by circling a number from 1 to 3 on each scale.

	Little Impact		Much Impact
1. OPEC Nations Raise Oil Prices 10%			
Impact on me	1	2	3
Impact on Vermont	1	2	3
Impact on the United States	1	2	3
2. Disease Destroys Cocoa Bean Plants in West Africa			
Impact on me	1	2	3
Impact on Vermont	1	2	3
Impact on the United States	1	2	3
3. Russia Boycotts 1984 Olympics			
Impact on me	1	2	3
Impact on Vermont	1	2	3
Impact on the United States	1	2	3
4. Peru Declares 200-mile Fishing Limit			
Impact on me	1	2	3
Impact on Vermont	1	2	3
Impact on the United States	1	2	3
5. Flu Epidemic Strikes Tokyo			
Impact on me	1	2	3
Impact on Vermont	1	2	3
Impact on the United States	1	2	3
6. Schools Require All Students to Take 2 Years of a Foreign Language			
Impact on me	1	2	3
Impact on Vermont	1	2	3
Impact on the United States	1	2	3

	Little Impact		Much Impact
7. Quebec Discovers New Oil Reserves			
Impact on me	1	2	3
Impact on Vermont	1	2	3
Impact on the United States	1	2	3
8. Russian Wheat Harvest Below Expectations			
Impact on me	1	2	3
Impact on Vermont	1	2	3
Impact on the United States	1	2	3
9. Kenya Approves Use of DDT			
Impact on me	1	2	3
Impact on Vermont	1	2	3
Impact on the United States	1	2	3
10. 50 Asian Refugees Arrive in Chelsea			
Impact on me	1	2	3
Impact on Vermont	1	2	3
Impact on the United States	1	2	3
11. Japan Agrees to Accept More U.S. Imports			
Impact on me	1	2	3
Impact on Vermont	1	2	3
Impact on the United States	1	2	3

WRAP-UP:

Teacher Directions:
Discuss with your students reasons why some events (eg. headlines) have more impact on you, and on the United States, than others. Write on the board the list of ECON TREK economic concepts and ask students which ones were involved with each headline and how?

Credit: Global Issues: Activities and Resources for the High School Teacher, Center for Teaching International Relations. Denver, Colorado.

FREEDOM OF TRADE

The major issue explored in this lesson is economic protectionism. Since the mid-1960's, many manufacturing industries in the United States have been faced with heavy competition from imported products. Consequently, domestic labor and industry have attempted to persuade Congress to implement certain restrictions designed to limit the flow of imported goods. What would be the effects of such restrictions? Do we have the right to restrict trade, especially with the developing nations? Which criteria are most important in determining whether to enact laws aimed at restricting trade? After examining the case study presented in this lesson, students should be able to formulate answers to these questions.

Suggested Courses and Topics: Economics (world trade, free trade vs. protectionism), current issues (current labor issues, world economic interdependence).

Time required: One class period.

Instructional Objectives: At the conclusion of this lesson, students will be better able to:

--Cite some of the arguments for and against free trade.
--Identify some alternatives to present U.S. tariff laws.
--Appreciate how much the U.S. consumer relies on trade with other nations for daily products.

Sources of Data: Publications of the International Trade Commission, U.S. Department of Commerce.

INTRODUCING THE LESSON:

1. Divide the class into small groups. Distribute copies of the Handout, "Feeling the Pinch in the Shoe Industry," and allow students a few minutes to read it.

2. Before continuing with the lesson, make sure that students understand the following terms:

   --Free trade. The virtual or total absence of such restrictions on trade as tariffs, quotas, and trade preferences.

   --Tariff. A tax placed on goods imported from abroad. The effect is to raise the price of the imported product because the seller must charge more in order to cover the tax.

   --Quota. A limit on the amount of a certain type of goods that can be imported into a country.

   --Protectionism. The application of such restrictions as tariffs, quotas, and trade preferences in order to protect native industries from foreign competition.

DEVELOPING THE LESSON:

3. Ask each group to pretend that it is the U.S. Senate Sub-Committee on Commerce and International Trade, whose task it is to consider the problem and make recommendations to the full Senate. Explain that each group will receive more information in the form of statements made by witnesses at a hearing.

4. Distribute copies of "Statements For and Against Free Trade." Ask the members of each group to read each statement and then, as a group, analyze the merits of its arguments.

5. After the groups have read and analyzed all the statements, ask each group to report its recommendation to the full "Senate" (class). The spokesperson for each group should be prepared to answer any questions the other students may have about that group's recommendation.

CONCLUDING THE LESSON:

6. After all the "subcommittees" have made their recommendations, focus a summary discussion on the following questions:

--What are the primary arguments for and against free trade?

--What factors seemed to be most important in determining the recommendation of your group?

--Would your group make a similar recommendation if the imported product happened to be a television set? Camera? Watch? Automobile?

--What were some of the conflicts your group had in deciding on a recommendation?

--How would you feel about free trade if you or a member of your family

a. were a salesperson for Toyota?
b. managed an American watch company?
c. owned a liquor store that specialized in French wines?
d. wanted to buy a German camera?
e. worked as a Peace Corps volunteer in a developing country?

--Are there any other alternatives to our present U.S. tariff laws besides those mentioned in the case study? If so, what?

--What have you learned about free trade from this activity?

FEELING THE PINCH IN THE SHOE INDUSTRY

For the past 40 years or so, the reduction of trade barriers around the world has generally been considered to be the surest long-range way of creating jobs in the U.S. and abroad. Between 1966 and 1976, however, the dollar value of shoes imported from other countries increased almost 800 percent. During the same period, the percentage of the total shoe market accounted for by imported shoes increased from 13 percent to nearly 50 percent. Because many of these shoes came from Taiwan and Korea, where wages are significantly lower than they are in the United States, they can be sold more cheaply than those manufactured in this country.

The tariff rate imposed by the United States on shoes is approximately 10 percent. However, the Trade Act of 1974 allows an import preference to developing nations; thus, products from those countries are subject to a lower tariff.

Since 1968, more than 300 domestic shoe companies have gone out of business, with the concomitant loss of 70,000 jobs. The growing penetration of the United States market by overseas shoe producers has created a chorus of cries for action.

In response to this pressure, the U.S. Senate Subcommittee on Commerce and International Trade initiated a series of hearings in early 1978 to examine the impact of foreign imports on the domestic shoe industry. This subcommittee has the authority to recommend to the full Senate several possible courses of legislative action on the basis of its analysis of arguments for and against protection of the threatened industry. A simple majority vote in the Senate would put into effect the recommendation of the subcommittee.

STATEMENTS FOR AND AGAINST FREE TRADE

Statements Against Free Trade

1. Fred Reardon, vice-president, Independent Shoemakers of America: "Drastic changes in the world economy have occurred since the end of World War II, and America's position in world trade has been deteriorating rapidly in the past ten years. A large part of the decline of America's position in the world economy is related to our government's failure to protect U.S. industries from unfair import competition. We are not against trade. We understand the need for developing countries to also share in some of the fruits of this earth of ours. But we also understand very much that there can be no such trade around the world unless the rules are the same for everybody. In effect, we say, 'Come and get it.' Nobody else does that. But we do. Federal programs to retrain our workers are a joke. They have become bogged down in red tape and bureaucracy. We would rather the government prevent the jobs from being lost in the first place. Other nations have taken steps to protect their industries. Unless our government does the same, we will soon be overrun by import." Recommendation: Increase the tariff rate to 40 percent once a 250-million-pair annual quota of shoes is exceeded.

2. James Harvey, chairperson, American Association of Shoe Manufacturers: "Last year profits in the shoe industry plummeted to their lowest point ever. We blame this on the competition brought on by the steadily increasing amount of foreign shoes imported into this country. Our workers, with an average wage of about $4.80 an hour, can't possibly compete with foreign workers earning $.40 or $.50 an hour. As a result, we are being forced to lay off thousands of workers each year. The American worker who loses his job can no longer be a customer for the products of American business. He will receive unemployment insurance payments, but when they run out he may be forced to go on welfare. This will add still another burden to the community. Unless tariffs are raised significantly, we will have no choice but to close down even more industries or else move them overseas to take advantage of the cheap labor situation there." Recommendation: Repeal the Trade Act of 1974 and increase the tariff rate to 50 percent of all imported shoes.

3. David Collins, president, U.S. Shoe Retailers Association: "We deplore the decline of the American shoe industry and the jobs that have been lost as a result. We are particularly against the unfair practice whereby some countries provide financial assistance to their exporters on the one hand and erect trade barriers on the other. On the other hand, if the domestic industry is afforded too much protection, this could lead to an unhealthy, noncompetitive atmosphere where U.S. manufacturers could raise their prices virtually at will. This would cause many stores to lose their customers and lay off their employees. We are willing to accept some higher prices but only if good-faith efforts are made by unions to improve productivity and by the manufacturers to modernize their plants and equipment." Recommendation: Increase the tariff to 20 percent once a 250-million-pair annual quota is exceeded. If the figure exceeds 300 million pair per year, increase the tariff to 30 percent.

Statements in Support of Free Trade

1. Joseph Dowling, spokesperson, Industry and Trade Administration, U.S. Department of Commerce: "There are few things less desirable for the prosperity and peace of the world than a resurgence of protectionist sentiment in America. If we close our markets through special concessions to special groups, we may be sure that the markets of the outside world will be to that degree shut in our face. This could lead to a deterioration of our relations with foreign countries. Also, free trade is one of the few means that poorer nations have available to gain the capital for development. Instead of erecting another trade barrier, we ought to help threatened companies gain access to computers and modern management methods, and distribute assistance so that workers may be retrained for other jobs. Remember, the severe tariff restrictions imposed by the United States in the late 1920s were a leading cause of the worldwide depression that soon followed. Let us be careful not to turn back the clock to the point where a new trade war may break out between nations." Recommendation" Keep tariff rates at current levels; provide financial assistance to beleaguered companies; develop programs to retrain workers.

2. Elizabeth Meyers, representative, National Consumers League: "This country is already facing a high inflation rate which is saddling consumers with substantial increases on the prices of manufactured goods. The ills of our trillion-dollar-plus economy cannot be blamed on $45 billion of imports. An increase in existing tariff rates is not the solution. In fact, it will only serve to reduce competition and push the inflation rate even higher. We estimate that an increase in the tariff on imported shoes will mean $200-300 million in additional costs to the consumer. Many of the companies seeking protection are 'basket cases' to begin with. The owners have failed to modernize and want to close the plants, but community pressure has prevented them from doing so. Now they can blame it on imports and therefore on the government for not protecting them. We must ask ourselves: Is this really a key industry that is in need of protection?" Recommendation: Decrease the current 10-percent tariff on shoes.

ADDITIONAL RESOURCES

Center for World Education
c/o David Shiman, David Conrad
College of Education
University of Vermont
Burlington, VT 05405
802-656-2030

Global Perspectives in Education
218 East 18th Street
New York, New York 10003
212-228-2470

Center for Teaching International Relations
University of Denver
Denver, Colorado 80208

Global Issues by Paul Mulloy and Ken Switzer ($7.95)
Social Science Education Consortium
855 Broadway
Boulder, Colorado 80302

Specialization in the work environment permits individuals to take advantage of their particular skills and abilities. Concentrating on what an individual can do best will result in productive efficiency and increase the total production of society. Moreover, with specialization, the worker becomes skillful in the tasks, is more likely to discover improved techniques of getting the job done, and avoids the loss of time entailed in shifting from one job to another. This is what Adam Smith was talking about in his discussion of "the division of labor".

Specialization is also desirable on a regional basis. It is possible to grow grain in New England and to produce milk in the midwest. However, the vast plains in the West are better suited to the efficient production of grains, while the small and rolling fields of Vermont are best suited for milk production. The Vermont farmer feeds imported grains to the cows and ships milk to the nearby population centers.

The advantages of specialization transcend international boundaries. Nations, like individuals, can gain by specializing in those products which they can produce with the greatest efficiency and trading for those goods which they cannot produce as efficiently. Nations are substantially different in their endowments of economic resources; the efficient production of various goods requires different technologies or combinations of resources. The result is trade on a world basis, with given areas of the world specializing in the production of goods in which they have a distinct cost advantage. For example, Japan has few natural resources, but much skilled labor. Hence, Japan can efficiently produce labor-intensive commodities such as cameras and electronic gear. Australia, with much land and a limited population, can cheaply produce land-intensive commodities such as wheat, wool, and meat.

Comparative advantage. This concept is related to the concept of specialization. An individual, a firm, or a geographical area will specialize in the production of a good or service in exchange for goods and services produced elsewhere. The good with the greatest comparative advantage or the least comparative disadvantage will be produced. Assuming a given stock of resources, a producer can produce a combination of goods. As an example, let us assume that Texas can produce wheat and oranges according to the following substitutions; if more of one good is produced than less of the other one can be produced:

	Production Level			
	A	B	C	D
Wheat (in Tons)	0	20	40	60
Oranges (in Tons)	15	10	5	0

This says if all efforts are in the production of wheat, 60 tons would be produced. If only 20 tons were produced, an additional 10 tons of oranges could be produced, etc. Putting it another way, five tons of oranges will be sacrificed in order to produce 20 more tons of wheat; or it costs one ton of oranges to get 4 tons of wheat in Texas.

Let us assume the following production possibilities for Florida:

	Production Level			
	A	B	C	D
Wheat (in Tons)	0	30	60	90
Oranges (in Tons)	30	20	10	0

Florida can produce 30 tons of wheat at a cost of ten tons of oranges. (The comparative cost rates for the two products is 1 orange = 3 wheat.) In Texas the comparative cost is 1 orange = 4 wheat. The comparative cost of the two products in the two states is clearly different; Florida has a comparative advantage in oranges. Florida has to forego less wheat to get a ton of oranges than is the case in Texas where one ton of oranges costs 4 tons of wheat.

Oranges are relatively cheap in Florida and Texas has a comparative cost advantage in the production of wheat. Given these conditions it will be advantageous to the two areas to specialize and trade. They can get a larger total output of oranges and wheat than if each state produces both crops.

Florida will specialize in oranges if they can obtain more than three tons of wheat for a ton of oranges through trade with Texas. Similarly, Texas will be happy to specialize in wheat provided they can get one ton of oranges for anything less than four tons of wheat. Thus the range of possible trade is one ton of oranges for from 3 to 4 tons of wheat. If we assume an exchange of 1 to $3\frac{1}{2}$ then clearly both Florida and Texas have gained. Florida has a greater comparative advantage in the production of oranges.

In the hypothetical data provided it is evident that Florida can outproduce Texas in both wheat and oranges. With given resources, Texas can produce 20 tons of wheat and 10 tons of oranges while Florida can produce 30 tons of wheat and 20 tons of oranges. This absolute advantage which Florida has would suggest that Florida should produce both wheat and oranges. However, even though an area has an absolute advantage in the production of goods, it is still possible for specialization and trade, and for both parties to be better off. Clearly the principle is one of comparative advantage, not absolute advantage.

Free trade means there are no man-made barriers to the free flow of goods and services between geographical regions of the world regardless of international boundaries. This is an ideal concept which exists in limited areas and with limited goods. The 50 states in the United States have always enjoyed trade unrestricted by barriers established by state boundaries.

Protectionism is a philosophy that certain regions or industries should be protected from the competition from other areas. Historically, the justification of protectionism has been based on the argument of "national defense" or "infant industries". That is, we protect certain industries from foreign competition so in the event of military conflict we will not be

dependent on foreign sources of supply of vital goods needed in the war effort. The infant industry argument is based on the notion that new and developing industries may not be as efficient and productive as established ones and thus deserve protection until they gain similar efficiencies. A third rationale for protectionism is that it stimulates domestic employment and production--an argument particularly popular as an economy encounters a recession. If foreign goods are kept out, those goods will need to be produced at home, thus stimulating the domestic economy. Protection is usually accomplished by erecting tariff barriers or establishing import quotas.

Tariffs are simply excise taxes on imported goods. They may be imposed for purposes of collecting revenue or to provide protection to domestic producers. Revenue tariffs are usually applied to products which are not produced domestically such as tin, coffee, or bananas. Protective tariffs are designed to shield domestic producers from foreign producers at a competitive disadvantage in the domestic markets.

Import quotas specify the maximum amount of specific commodities which may be imported during a given time period. Import quotas may be much more effective in restricting the flow of goods than tariffs because once the quota has been reached no additional movement of goods takes place. In the case of tariffs, the tax may be high but if the market will absorb the goods at a price which includes the tariff, the only limit to the flow of goods is the extent of the market demand.

Balance of trade refers to the flow of goods and services between a country and the rest of the world. If a nation has a "favorable balance of trade' it means that the market value of goods and services sold abroad exceeds the value of goods and services bought from foreign sellers. An unfavorable balance means just the opposite. Obviously all nations cannot simultaneously enjoy a favorable trade balance.

International balance of payments is an annual accounting statement summarizing all the transactions which take place between the residents (individuals, businesses, and governmental units) of one country and the residents of all other foreign nations. The international balance of payments statement always balances. It must, because every transaction which occurs must be settled (paid for) in one way or another. In addition to the exports and imports of goods and services the balance of payments statement shows the income from U.S. investments abroad and foreign investments in U.S.; the net remittances of private gifts or grants; net government transactions (grants, military assistance, economic, loans, etc.); and net capital movements. A summation of these accounts shows the financial balances which are due U.S. or which we owe to the rest of the world. An additional entry shows how those balances were financed; namely, either a flow of gold or a change in the dollar balances held by foreigners.

Exchange rates refers to the rates at which one currency exchanges for another. At the present time the world has freely fluctuating exchange rates which means that the rate of exchange between any two currencies is determined by the forces of demand and supply. American importers demand British pounds (supply dollars) to pay for goods bought in England while simultaneously English firms are demanding American dollars (supplying pounds) to pay American exporters for goods purchased here. If American importers are buying more goods in England than English individuals and firms are buying here there is a strong demand for pounds relative to the available supply, and the price of pounds rises in terms of American dollars: the exchange rate changes and the dollar has "fallen" relative to the pound, etc. Presently the flow of goods and services, investments, and investment income remittance and government actions establish the market for foreign currencies and thus their respective prices.

Productivity refers to the output per unit of input. Labor productivity obviously is the amount of physical output per unit of labor time. Increases in productivity for a society come about not because we work harder but because we work with better tools and equipment or have found better ways to produce the good(s). If productivity increases, then labor costs per unit of output goes down and (if all other things remain equal), the price of the product can fall. Alternatively, if productivity increases, the worker can be paid more and the price of the product can still remain the same. Cheap foreign labor (low wage rates) does not necessarily mean that a good can be produced cheaper abroad. The issue is, what is the labor cost per unit of product. Inefficient labor, labor with low productivity, may result in labor costs per unit of product equal to or higher than that produced by highly paid laborers who are much more productive.